

REGION 6 EXECUTIVE SUMMARY

TOPIC: Grants Mining District Five-Year Plan

DATE: March 14, 2013

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PURPOSE/ACTION NEEDED: Superfund Director Briefing

5-YEAR PLAN OVERVIEW:

In 2010, Region 6 and nine other federal, state and tribal regulatory agencies developed a 5-Year Plan to assess health and environmental impacts in GMD. The components of the plan are as follows:

GMD 5-Yr Plan

Partners:

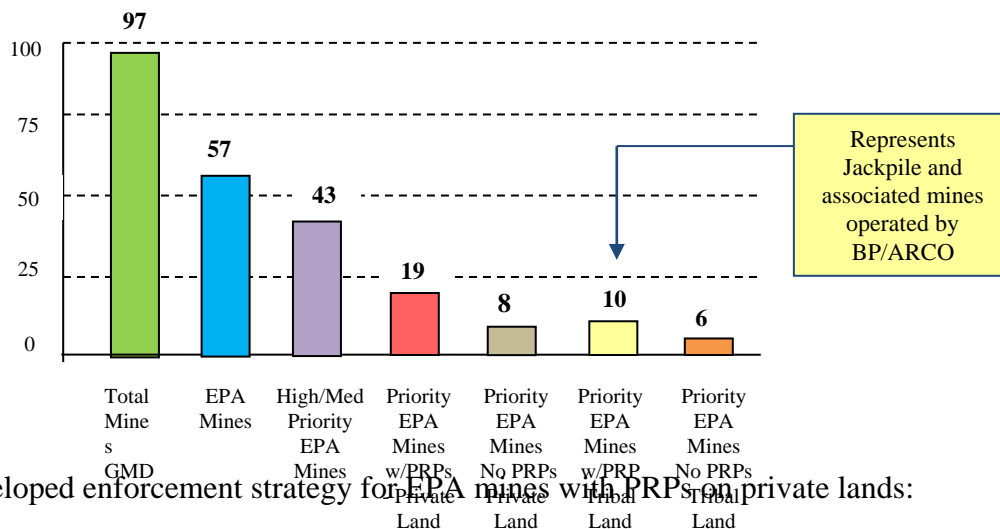
Pueblo of Laguna
NMED
NMEMNRD
NMDOH
ATSDR
U.S. NRC
U.S. DOE
U.S. DOI
U.S. FS
U.S. EPA

1. Water Sources

- Residents rely primarily on private wells for water supplies.
- Billions of gallons of water from mine dewatering operations and liquids from mill tailing impoundments seeped into the alluvial and bedrock aquifers within the San Mateo Creek (SMC) basin.
- Ground water contamination (Uranium, Selenium) was first discovered in the SMC basin near Homestake mill in 1970s by NM. Extent of contamination within the 321 square mile basin is unknown. Specific mine sources are also unknown.
- EPA is conducting a ground water investigation. If a CERCLA release is documented, San Mateo Creek basin ground water will be evaluated for proposed listing. Funding issues have slowed this effort.

2. Legacy Uranium Mines

- 97 uranium mines have been identified for further assessment; the mines are assigned to regulatory authorities based on land ownership and regulatory involvement: EPA (57), NM (18), BLM (17) and USFS (5).
- EPA aerial gamma survey (ASPECT) conducted over mines and other areas in 2010 and 2011 showed elevated radiation levels at many mines.
- Based on ASPECT data, PRP searches and land ownership, the EPA mines are categorized as follows:



- EPA developed enforcement strategy for EPA mines with PRPs on private lands:



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- Document CERCLA release by performing a limited investigation at minimal cost (Documented Release Sampling or DRS);
 - Based on DRS findings, determine if Site conditions meet CERCLA criteria for performing a Removal Action (*e.g.*, potential for off-site migration of hazardous substance);
 - If Removal Action warranted, negotiate agreement (AOC) with PRP to perform Removal site assessment;
 - Following completion of site assessment, determine appropriate cleanup. Pursue enforcement action for PRP to perform or fund cleanup and reimburse EPA's costs.
- Work by EPA is ongoing at 9 mines with PRPs. Additional DRS investigations are planned at three more mines in 2013. With the completion of these 12 DRS investigations, at least one mine site operated by every viable PRP within the GMD will have been assessed for a CERCLA release. This information has enforcement implications for a (b) (5). See attached table.

3. Former Uranium Mills

- There are five mills in the GMD: four are under DOE long-term surveillance and management and the fifth (Homestake NPL site) is being addressed by EPA/NRC. DOE is reassessing the Bluewater Mill ground water plume.

4. Contaminated Structures/Properties

- 603 properties and 358 homes have been tested by Removal Program to date; properties are located in Laguna villages, subdivisions south of Homestake and near several mines.
- Removal actions performed are resident relocation (1), structure demolition and replacement (1), soil removals (46), and radon abatement system installations (32).
- Current work includes properties south of Homestake (Mormon Farms), Bluewater Village; upcoming work is planned for Acoma villages.
- After the work at Acoma, the only remaining areas which may require investigation of residential structures/properties within the GMD are the Zuni villages.

5. Jackpile Mine

- Site is proposed to NPL; final rulemaking is planned for October 2013. EPA is working with Pueblo of Laguna to address FOIA from ARCO.

6. Public Health Surveillance

- In 2010, NMDOH performed uranium biomonitoring (urine) on 99 volunteers in GMD. Most volunteers provided drinking water sample from home as well. Twenty nine volunteers were identified with exposure to uranium. Three had elevated uranium in drinking water.

EPA and NM Priority Mines with Viable PRPs

	No.	Mine	Priority	PRP	DRS	104(e) Request	GNL Issuance	Negotiation (AOC)	Removal Site Accessment	EPA Decision Making	Cost To Date
Removal	1	Johnny M Mine	High	(b) (7)(A)	4/2012	4/2011 (Issued w/ GNL)	4/2011	8/2012 ¹ EE/CA	Start 9/2012 EE/CA 2013		>\$1.0M
Phase I	2	Sandstone	High		3/2012	6/2011	Pending				\$33,000
	3	John Bully Shaft	High		3/2012	6/2011	Pending				\$33,000
Phase II	4	Dysart No. 2	High		2/2012	12/2011					\$34,000
	5	Section 12 Mine	High		2/2012	12/2011					\$34,000
Phase III	6	Section 10 Mine	High		Start 2/2013						\$30,000
	7	Section 15 Mine	High		Start 2/2013						\$30,000
	8	Section 30 Mine ²	High		Start 2/2013						\$30,000
	9	Marquez Mine	High		Start 2/2013						\$30,000
	10	Mt. Taylor Mine	High		Planned						
	11	Section 9 Mine	High		Planned						
	12	Faith Mine	Medium		Planned						
	12	Mary No. 1 Mine	High								
	13	Chill Willis Mine	High								
	14	Hope	Medium								
	15	Dysart No. 1	Medium								
	16	Bucky Mine	Medium								
	17	Hogan Mine	Medium								
	19	F-33 Mine	TBD								
	20	Tom Mine	TBD								

¹. EPA recovers 100% of removal cost (over \$1M for resident relocation) and future oversight costs through Settlement.

². Rio Algom mine assigned to NM. However, EPA elected to conduct DRS because (b) (7)(A)

(b) (7)(A)



NM Mine